

REMARKS

By this amendment, claims 1, 2, 10 and 11 have been amended. Accordingly, claims 1-21 are currently pending in the application, of which claims 1, 10, 20 and 21 are independent claims. Applicants appreciate the indication that claims 8, 9, 18 and 19 contain allowable subject matter. Applicants further appreciate the indication that claims 20 and 21 are allowed.

Applicants respectfully submit that the above amendments do not add new matter to the application and are fully supported by the specification. Support for the amendments may be found at least in Figures 2E and 3, and at least at paragraphs [0036]-[0038] of the specification.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Rejections Under 35 U.S.C. § 102

Claims 1, 3, 6, 7, 10-13, 16 and 17 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U. S. Patent No. 6,870,186 issued to Park, *et al.* ("Park"). Applicants respectfully traverse this rejection for at least the following reasons.

In order for a rejection under 35 U.S.C. § 102(e) to be proper, a single reference must disclose every claimed feature. To be patentable, a claim need only recite a single novel feature that is not disclosed in the cited reference. Thus, the failure of a cited reference to disclose one or more claimed features renders the 35 U.S.C. § 102(e) rejection improper.

Claim 1 recites, *inter alia*, "a second pixel electrode located on the first pixel electrode and entirely covering the first pixel electrode." Park does not teach these features. Rather, in Park's Figure 11, Park teaches second electrode 438 contacting only the top surface of buffer electrode 440. Further, Park teaches buffer electrode 440 contacting only the top surface of conductive connector 414. As shown in the current application's Figure 1 and discussed in the

corresponding Background of the Invention section, contacting only the top surface may not be sufficient to prevent exposure to an electrolyte solution and galvanic corrosion. See paragraphs [0008]-[0009]. Therefore, claim 1 includes the limitation, not disclosed by Park, that a second electrode "entirely cover[s]" the first electrode. Accordingly, Park fails to teach all elements of claim 1.

Similarly, claim 10 recites, *inter alia*, "forming a second pixel electrode on the first pixel electrode to entirely cover the first pixel electrode." As asserted above, Park does not teach these features. Park fails to teach forming a second electrode "entirely cover[ing]" a first electrode. Accordingly, Park also fails to teach all elements of claim 10.

Claims 1 and 10 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U. S. Patent No. 6,787,249 issued to Seo ("Seo"). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 1 as amended recites, *inter alia*, "wherein a side surface of the first pixel electrode has a taper." Seo does not teach these features. Rather, in Seo's Figure 5A, Seo teaches a first pixel electrode 503 with side surfaces that are substantially perpendicular to the substrate 501. Further, the top surface of first pixel electrode 503 is shown with substantially the same dimension as the lower surface of the first pixel electrode 503. Accordingly, Seo fails to teach a taper in the side surface of the first pixel electrode 503. Therefore, Seo fails to teach all elements of claim 1.

Similarly, claim 10 as amended recites, *inter alia*, "wherein a side surface of the first pixel electrode is formed to have a taper." As asserted above, Seo does not teach these features. Seo fails to teach forming a lower electrode "wherein a side surface of the first pixel electrode is formed to have a taper." Accordingly, Seo also fails to teach all elements of claim 10.

Claims 1, 3, 4, 10, and 12-14 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U. S. Patent No. 6,608,449 issued to Fukunaga ("Fukunaga"). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 1 recites, *inter alia*, "a second pixel electrode located on the first pixel electrode and entirely covering the first pixel electrode." Fukunaga does not teach these features. Rather, in Fukunaga's Figure 2A, Fukunaga teaches second pixel electrode 208 contacting only the top surface of first pixel electrode 207. As asserted above, claim 1 includes the limitation, not disclosed by Fukunaga, that a second electrode "entirely cover[s]" the first electrode.

Claim 1 as amended also recites, *inter alia*, "wherein a side surface of the first pixel electrode has a taper." Fukunaga does not teach these features. Rather, in Fukunaga's Figure 2A, Fukunaga teaches a first pixel electrode 207 with side surfaces that are substantially perpendicular to the substrate 201 and without taper. Accordingly, Fukunaga fails to teach a taper in the side surface of the first pixel electrode 207.

Therefore, Fukunaga fails to teach all elements of claim 1.

Similarly, claim 10 as amended recites, *inter alia*, "forming a second pixel electrode on the first pixel electrode to entirely cover the first pixel electrode." As asserted above, Fukunaga does not teach these features. Fukunaga fails to teach forming a second electrode "entirely cover[ing]" a first electrode.

Claim 10 as amended also recites, *inter alia*, "wherein a side surface of the first pixel electrode is formed to have a taper." As asserted above with respect to claim 1, Fukunaga does not teach these features. Fukunaga fails to teach forming a lower electrode "wherein a side surface of the first pixel electrode is formed to have a taper."

Accordingly, Fukunaga also fails to teach all elements of claim 10.

Since none of the other prior art of record discloses or suggests all the features of the claimed invention, Applicants respectfully submit that independent claims 1 and 10, and all the claims that depend therefrom, are allowable. Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 102(e) rejections of claims 1-4, 6-7, 10-14, and 16-17. Claims 3-7 depend from claim 1 and are allowable at least for this reason. Claims 12-17 depend from claim 10 and are allowable at least for this reason.

Rejections Under 35 U.S.C. § 103

Claims 5 and 15 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Fukunaga. Applicants respectfully traverse this rejection for at least the following reasons.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the reference or references, when combined, must disclose or suggest all of the claim limitations. The motivation to modify the prior art and the reasonable expectation of success must both be found in the prior art and not based upon a patent applicant's disclosure. See *in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Office Action fails to establish a *prima facie* case of obviousness. Assuming *arguendo* that the references may be combined and a reasonable expectation of success exists, the combined references do not disclose or suggest all of the claim limitations.

Claim 5 depends from claim 1, and claim 15 depends from claim 10. None of the references, alone or in combination, teach all elements of claims 1 and 10. Accordingly, since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of claims 1 and 10, Applicants respectfully submit that dependent

claims 5 and 15 depend from allowable claims 1 and 10, respectively, and are allowable at least for this reason. Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 5 and 15.

Allowable Subject Matter

Applicants appreciate the indication that claims 8, 9, 18 and 19 contain allowable subject matter. Claims 8 and 9 depend from claim 1, which is an allowable claim. Further, claims 18 and 19 depend from claim 10, which is an allowable claim. Accordingly, Applicants submit that claims 8, 9, 18 and 19 are in condition for allowance.

Applicants appreciate the indication that claims 20 and 21 are allowed.

CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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Date: June 20, 2006

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